

chamber and a second portion that defines a storage chamber. At least the portion of the container defining the preparation chamber is transparent to microwave energy.

5 In accordance with the invention the improvement comprises the storage chamber portion of the container having a microwave shielding material disposed therearound, such that, as a comestible material initially disposed within the preparation chamber is cooked by exposure to microwave energy the comestible material displaces from the preparation chamber into the storage chamber whereat the comestible material is
10 shielded from further exposure to microwave energy by the microwave shielding material.

In the disposable container embodiment the second portion is expandable to define the storage chamber. In the reusable container embodiment the preparation chamber is removable from the storage
15 chamber. In addition a diverter may be provided in the storage chamber.

BRIEF DESCRIPTION OF THE FIGURES

The invention will be more fully understood from the following detailed description taken in connection with the accompanying drawings which form a part of this application and in which:

20 Figures 1A and 1B are side elevational views entirely in section of a disposable container for preparing a comestible material in a microwave oven in accordance with the present invention before and after exposure of the comestible material to microwave energy, respectively; Figure 1C is an enlarged view of a portion of the disposable container of Figure 1A showing a first alternative microwave shielding material; and Figure 1D is an enlarged view of a portion of the disposable container of Figure 1A showing a second alternative microwave shielding material;
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Figures 2A and 2B illustrate a modified version of the disposable container of Figures 1A, 1B before and after exposure of the comestible material to microwave energy, respectively;
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Figures 3A and 3B illustrate another modified version of the disposable container of Figures 1A, 1B before and after exposure of the comestible material to microwave energy, respectively;

Figures 4A and 4B illustrate yet another modified version of the disposable container of Figures 1A, 1B before and after exposure of the comestible material to microwave energy, respectively, while Figure 4C illustrates an alternative modification;
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Figures 5A and 6A are side elevational views entirely in section of another modified embodiment of a disposable container in accordance with the present invention respectively viewed along orthogonal section lines 5A-5A; 6A-6A prior to the exposure of a comestible article within the container to microwave energy;

Figures 5B and 6B are views respectively corresponding to Figures 5A and 6A after exposure of a comestible article within the container to microwave energy; and

Figure 7A and 7B are side elevational views entirely in section of a reusable container in accordance with the present invention before and after exposure of the comestible material to microwave energy, respectively; and Figure 7C is enlarged view of a portion of the wall of the reusable container of Figure 7A.

DETAILED DESCRIPTION OF THE INVENTION

Throughout the following detailed description similar reference characters refer to similar elements in all figures of the drawings.

With reference to Figures 1A and 1B shown is a disposable container generally indicated by the reference character 10 for preparing a comestible material indicated by the reference C in a microwave oven. Figure 1A illustrates the container 10 in its on-the-shelf configuration while Figure 1B illustrates the configuration of the container 10 after exposure of the comestible material to microwave energy and prior to opening. An optional outer protective wrapping (not shown) may surround the container 10, if desired. In the preferred usage of the present invention the comestible material C is kernels of popping corn in an edible oil, such as partially hydrogenated vegetable oil.

The container 10 includes a first portion 12 and a second, expandable, portion 14. The first portion 12 defines a preparation chamber 16 in which the comestible material C is disposed. The comestible material C may be positioned on an optional layer of a microwave susceptor 20. Any suitable susceptor 20 may be used. The susceptor sold by E. I. du Pont de Nemours and Company, Wilmington, Delaware, under the trademark Mylar OL[®] has been found suitable.

The second portion 14 of the container, when expanded, defines a storage chamber 18 (Figure 1B) in which the cooked comestible material

preparation chamber 116 may comprise an annular recess 117 (see Fig. 7B) for receiving the comestible material. An optional susceptor 120 may be positioned in the preparation chamber 116.

5 The lower portion 114 may be constructed of a material that provides an integral shielding function for the storage chamber 118. Alternatively the lower portion 114 may have a shielding material 128 layered thereon ~~thereon~~. On the right-hand side of Figure 7A the shielding 128 is shown on the inside of the lower portion 114 (better seen in the enlarged view of Figure 7C) while on the left-hand side of Figure 7A the shielding 128' is shown on the outside
10 of the lower portion 114.

A hollow conduit 124 may connect the preparation chamber 116 to the storage chamber 118. The hollow conduit may be tapered as shown and may be configured to attenuate microwave energy thereby to prevent the entry of substantially all the microwave energy into the storage chamber,
15 such as by having a layer of shielding material 128 thereon.

In operation the preparation chamber 116 receives the charge of popcorn C and an edible oil (see Figure 7A). When the comestible material C initially disposed within the preparation chamber 116 is cooked by exposure to microwave energy the cooked comestible material C' (see Figure 7B)
20 displaces from the preparation chamber into the storage chamber 118 whereat the cooked comestible material C' is shielded from further exposure to microwave energy by the microwave shielding material 128. A diverter or deflector of a suitable shape 130, 130' may be positioned to divert the cooked comestible material C' and thus distribute it within the storage
25 chamber 118.